**Dominion Resources Services, Inc.**
5000 Dominion Boulevard, Glen Allen, VA 23060

Web Address: www.dom.com

August 8, 2016

**BY U.S. MAIL RETURN RECEIPT REQUESTED**
9590 9401 0103 5168 7639 91

Mr. William F. Durham
Director, Division of Air Quality
West Virginia Division of Environmental Protection
601 57th Street
Charleston, WV 25304

**Subject:** **Dominion Transmission, Inc. – Title V Renewal Application**
**West Union Plant – R30-01700011-2012**

Dear Mr. Durham:

Enclosed please find the Title V Renewal Application for Dominion Transmission, Inc.'s (DTI) West Union Plant, Permit No. R30-01700011-2012. The enclosure consists of one hard copy and two cd copies of the application that includes all attachments.

As part of the Title V renewal application, the equipment list has been updated based on recent updates to the West Union Plant:

- Equipment removed from the facility:
    - TK04 – 150-gallon Horizontal Aboveground Wastewater Storage Tank
- Equipment added to the facility:
    - TK09 – 1,000-gallon Horizontal Aboveground Used Oil Storage Tank
- Correction to equipment at the facility:
    - TK05 – This tank was previously listed as a wastewater storage tank, but the correct description is a produced fluids storage tank.

In addition, as part of the renewal application, we request the following change to the Title V permit:

- Section 4.0

  Permit Conditions listed in Section 4.0 (Reciprocating Combustion engines [001-01 and 001-02]) of the current Title V permit for the two (2) reciprocating internal combustion

engines (RICE) (Units 001-01 and 001-02) will need to be updated to reflect the most current version of 40 CFR 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. In addition, these two (2) engines are considered remote stationary RICE's meeting the criteria established in 40 CFR 63.6675. As such, only the applicable conditions of 40 CFR 63 Subpart ZZZZ associated with remote stationary RICE's for these two (2) non-emergency spark ignition 4-stroke rich burn engines greater than 500 hp at an area source of HAPs should be included in the Title V permit.

Note, West Virginia Division of Environmental Protection (WVDEP) was notified and acknowledged in email correspondence between Mr. Joseph Pietro of Dominion and Ms. Carrie McCumbers of WVDEP, dated May 17, 2016, that the conditions listed in Section 4.0 of the current Title V Permit for the two (2) engines will need to be corrected since these engines are considered remote stationary RICE's.

If you require any additional information, please contact Joseph Pietro at (804) 273-4175 or via email at Joseph.J.Pietro@dom.com.

Sincerely,

Amanda B. Tornabene
Director, Energy Infrastructure Environmental Services

cc: Joseph Pietro, Dominion

tra

# WEST UNION PLANT
# DOMINION TRANSMISSION, INC.
# APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL
# TITLE V OPERATING PERMIT NO: R30-01700011-2012

**Dominion Transmission, Inc.**
West Union Plant
Highway 18
West Union, WV 26456

**AUGUST 2016**

**DOMINION TRANMISSION, INC.**
**WEST UNION PLANT**

**TITLE V OPERATING PERMIT RENEWAL APPLICATION**

## TABLE OF CONTENTS



## ATTACHMENTS



****Note:** There are no Attachments F, G and H for this permit application.

## TITLE V PERMIT APPLICATION CHECKLIST FOR ADMINISTRATIVE COMPLETENESS

| Requirement | Application |
|---|---|
| One signed copy of the application (per WVDEP email correspondence 4/16/15) | Enclosed – Section 2 |
| Correct number of copies of the application on separate CDs or diskettes, (i.e. at least one disc per copy) | Enclosed – 2 CDs |
| *Table of Contents (needs to be included but not for administrative completeness) | Table of Contents |
| Facility Information | Section 1/Section 2 |
| Description of process and products, including NAICS and SIC codes, and including alternative operating scenarios | Section 1 / Section 2: TV Renewal Application Form Section #14 |
| Area map showing plant location | Attachment A |
| Plot plan showing buildings and process areas | Attachment B |
| Process flow diagram(s), showing all emission units, control equipment, emission points, and their relationships | Attachment C |
| Identification of all applicable requirements with a description of the compliance status, the methods used for demonstrating compliance, and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the source is not in compliance | Not Applicable |
| Listing of all active permits and consent orders (if applicable) | Section 2: TV Renewal Application Form Section #21 |

| | |
|---|---|
| Facility-wide emissions summary | Section 2: TV Renewal Application Form Section #23 |
| Identification of Insignificant Activities | Section 2: TV Renewal Application Form Section #24 |
| ATTACHMENT D – Title V Equipment Table completed for all emission units at the facility except those designated as insignificant activities | Attachment D |
| ATTACHMENT E – Emission Unit Form completed for each emission unit listed in the Title V Equipment Table (ATTACHMENT D) and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the emission unit is not in compliance | Attachment E<br><br>Attachment F not applicable |
| ATTACHMENT G – Air Pollution Control Device Form completed for each control device listed in the Title V Equipment Table (ATTACHMENT D) | Attachment G not applicable |
| ATTACHMENT H – Compliance Assurance Monitoring (CAM) Plan Form completed for each new control device for which the "Is the device subject to CAM?" question is answered "Yes" on the Air Pollution Control Device Form (ATTACHMENT G) | Attachment H not applicable |
| General Application Forms signed by a Responsible Official | Enclosed – Section 2 |
| Confidential Information submitted in accordance with 45CSR31 | Not Applicable |

# SECTION 1

Introduction

## 1.0 INTRODUCTION:

West Union Plant is a natural gas liquids (NGL) extraction facility operated by Dominion Transmission, Inc. (Dominion) and located in West Union, Doddridge County, West Virginia. It first began operating in 1983 and was acquired by Dominion on December 29, 2000. Propane and heavier components of natural gas are removed through a turbo-expander cryogenic process and trucked offsite for delivery to Dominion's Hasting Extraction Plant in Wetzel County, West Virginia, the Natrium Extraction Plant in Marshall Co., WV, or any other facility that can legally accept the product.

West Union Plant has the potential to emit in excess of 100 tons per year of nitrogen oxides ($NO_x$). The station is classified as a major stationary source under West Virginia Department of Environmental Protection (WVDEP) Regulation (45 CSR Part 30) and is subject to the Title V Operating Permit provisions of Part 30. West Union Plant is an area source of hazardous air pollutants (HAPs) since the potential to emit is less than 10 tons per year for individual HAPs and less than 25 tons per year of combined HAPs.

The last Title V Operating Permit renewal application was submitted in July 2011, and the renewed Title V Operating Permit (Permit No.: R30-01700011-2012) was issued on March 5, 2012, with an expiration date of March 5, 2017. The current Title V operating permit is for the operation of two (2) reciprocating engines (001-01 and 001-02) each rated at 730 horse power (hp), and eight (8) aboveground storage tanks of various sizes and product storage tanks (TK01 – TK03, TK05 – TK09).

## 2.0 PROCESS DESCRIPTION

West Union Plant is a NGL extraction facility in which propane and heavier components of natural gas are removed through a turbo-expander cryogenic process. There are no air pollution control devices associated with this facility.

The facility receives "wet" natural gas from Equitrans and processes it through a turbo-expander cryogenic process. The resulting fluid removed from the natural gas is a mixture of ethane, propane, iso and normal butane, and hexanes. The product is termed NGL. This liquid is stored in a battery of three bullet style 30,000-gallon pressure tanks. The NGL product is trucked off for delivery to Dominion's Hasting Extraction Plant in Wetzel Co., WV, the Natrium Extraction Plant in Marshall Co., WV, or any other facility that can legally accept the product.

The reciprocating compressor units (001-01 and 001-02) pump the natural gas through the plant. Engine oil and antifreeze are kept in bulk pressurized storage tanks to maintain compressor engine operations. The stripped natural gas is delivered back to Equitrans by pipeline. Also, besides the saleable NGL product, produced fluids are generated and stored in a 5,000-gallon horizontal storage tank (TK05).

Listed below is a description of the equipment located at the West Union Plant:

Two (2) 730 hp Caterpillar 399TA Compressor Engines

- Emission unit ID: 001-01 and 001-02

- Emission point ID: 001 & 004, and 002 & 004, respectively.

One (1) 3,000-gallon vertical aboveground lube oil storage tank

- Emission unit ID: TK01
- Emission point ID: TK01

One (1) 550-gallon horizontal aboveground ethylene glycol storage tank

- Emission unit ID: TK02
- Emission point ID: TK02

One (1) 150-gallon horizontal aboveground methanol storage tank

- Emission unit ID: TK03
- Emission point ID: TK03

One (1) 5,000 gallon vertical aboveground produced fluids storage tank

- Emission unit ID: TK05
- Emission point ID: TK05

Three (3) 30,000-gallon horizontal aboveground NGL storage tanks

- Emission unit ID: TK06 – TK08
- Emission point ID: TK06 – TK08

One (1) 1,000-gallon horizontal aboveground used oil storage tank

- Emission unit ID: TK09
- Emission point ID: TK09

The above listed 1,000-gallon horizontal aboveground used oil storage tank (TK09) is a new unit that was added to the plant in 2012.

# SECTION 2

Title V Operating Permit
Renewal Application –
General Forms

**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION**
**DIVISION OF AIR QUALITY**
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.dep.wv.gov/daq

# INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

***Section 1: General Information***

1. **Name of Applicant (As registered with the WV Secretary of State's Office):**
Dominion Transmission, Inc.

**2. Facility Name or Location:**
West Union Plant

**3. DAQ Plant ID No.:**
0 1 7 — 0 0 0 1 1

**4. Federal Employer ID No. (FEIN):**
5 5 0 6 2 9 2 0 3

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence? 1984
☒ Permit Renewal — What is the expiration date of the existing permit? 03/05/2017
☐ Update to Initial/Renewal Permit Application

**6. Type of Business Entity:**

☒ Corporation ☐ Governmental Agency ☐ LLC
☐ Partnership ☐ Limited Partnership

**7. Is the Applicant the:**

☐ Owner ☒ Operator ☐ Both

If the Applicant is not both the owner and operator, please provide the name and address of the other party.
Dominion Gathering and Processing, Inc.
120 Tredegar Street
Richmond, VA 23219

**8. Number of onsite employees:**
2

**9. Governmental Code:**

☒ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

**10. Business Confidentiality Claims**

Does this application include confidential information (per 45CSR31)? ☐ Yes ☒ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

| 11. Mailing Address | | |
|---|---|---|
| **Street or P.O. Box:** 925 White Oaks Blvd. | | |
| **City:** Bridgeport | **State:** WV | **Zip:** 26330 |
| **Telephone Number:** (681) 842-3000 | **Fax Number:** (681) 842-3323 | |

| 12. Facility Location | | |
|---|---|---|
| **Street:** Highway 18 | **City:** West Union | **County:** Doddridge |
| **UTM Easting:** 516.45 km | **UTM Northing:** 4352.50 km | **Zone:** ☒ 17 or ☐ 18 |
| **Directions:** 5 miles north of West Union on Highway 18, Doddridge County. | | |
| **Portable Source?** ☐ Yes ☒ No | | |
| **Is facility located within a nonattainment area?** ☐ Yes ☒ No | | **If yes, for what air pollutants?** |
| **Is facility located within 50 miles of another state?** ☒ Yes ☐ No | | **If yes, name the affected state(s).** Pennsylvania Ohio |
| **Is facility located within 100 km of a Class I Area[1]?** ☒ Yes ☐ No<br>**If no, do emissions impact a Class I Area[1]?** ☐ Yes ☐ No | | **If yes, name the area(s).** Otter Creek Wilderness Area |
| [1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.* | | |

| 13. Contact Information | | |
|---|---|---|
| **Responsible Official:** Brian C. Sheppard | | **Title:** Vice President, Pipeline Operations |
| **Street or P.O. Box:** 925 White Oaks Blvd. | | |
| **City:** Bridgeport | **State:** WV | **Zip:** 26330 |
| **Telephone Number:** (681) 842-3733 | **Fax Number:** (681) 842-3323 | |
| **E-mail address:** Brian.C.Sheppard@dom.com | | |
| **Environmental Contact:** Joseph Pietro | | **Title:** Environmental Specialist |
| **Street or P.O. Box:** 5000 Dominion Blvd. | | |
| **City:** Glen Allen | **State:** VA | **Zip:** 23060 |
| **Telephone Number:** (804) 273-4175 | **Fax Number:** (804) 273-2964 | |
| **E-mail address:** Joseph.J.Pietro@dom.com | | |
| **Application Preparer:** Joseph Pietro | | **Title:** Environmental Specialist |
| **Company:** Dominion Resources, Inc. | | |
| **Street or P.O. Box:** 5000 Dominion Blvd. | | |
| **City:** Glen Allen | **State:** VA | **Zip:** 23060 |
| **Telephone Number:** (804) 273-4175 | **Fax Number:** (804) 273-2964 | |
| **E-mail address:** Joseph.J.Pietro@dom.com | | |

**14. Facility Description**

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

| Process | Products | NAICS | SIC |
|---|---|---|---|
| Natural Gas Liquid Extraction | Natural Gas Liquids (NGL) | 211112 | 1321 |
| | | | |
| | | | |
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**Provide a general description of operations.**

The West Union Extraction Plant is a natural gas liquids extraction facility. Propane and heavier components of natural gas are removed through a turbo-expander cryogenic process.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A.**

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B.** For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C.** Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

*Section 2: Applicable Requirements*

| **18. Applicable Requirements Summary** | |
|---|---|
| Instructions: Mark all applicable requirements. | |
| ☐ SIP | ☐ FIP |
| ☐ Minor source NSR (45CSR13) | ☐ PSD (45CSR14) |
| ☒ NESHAP (45CSR34) | ☐ Nonattainment NSR (45CSR19) |
| ☒ Section 111 NSPS (Subpart KKK) | ☒ Section 112(d) MACT standards (Subpart ZZZZ) |
| ☐ Section 112(g) Case-by-case MACT | ☒ 112(r) RMP |
| ☐ Section 112(i) Early reduction of HAP | ☐ Consumer/commercial prod. reqts., section 183(e) |
| ☐ Section 129 Standards/Reqts. | ☐ Stratospheric ozone (Title VI) |
| ☐ Tank vessel reqt., section 183(f) | ☐ Emissions cap 45CSR§30-2.6.1 |
| ☐ NAAQS, increments or visibility (temp. sources) | ☐ 45CSR27 State enforceable only rule |
| ☒ 45CSR4 State enforceable only rule | ☐ Acid Rain (Title IV, 45CSR33) |
| ☐ Emissions Trading and Banking (45CSR28) | ☐ Compliance Assurance Monitoring (40CFR64) |
| ☐ CAIR $NO_x$ Annual Trading Program (45CSR39) | ☐ CAIR $NO_x$ Ozone Season Trading Program (45CSR40) |
| ☐ CAIR $SO_2$ Trading Program (45CSR41) | |

**19. Non Applicability Determinations**

**List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.**

40 CFR 63, Subpart HH "National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities" is not applicable to West Union plant because it doesn't have a "triethylene glycol (TEG) dehydration unit located at a facility" (as per 40 CFR §63.760(b)(2)). Additionally, the Subpart HH requirements for natural gas liquids extraction do not apply to nonMajor/Area HAP sources.

40 CFR 60, Subpart K "Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced after June 11, 1973 and prior to May 19, 1978" – all tanks were constructed after July 23, 1984, therefore they are exempt them from this subpart.

40 CFR 60, Subpart Ka "Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction or Modification Commenced after May 18, 1978 and prior to July 23, 1984" – all tanks were constructed after July 23, 1984, therefore they are exempt them from this subpart.

40 CFR 60, Subpart Kb "Standards of Performance for VOC Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984" : tanks TK01, TK02, TK03, TK05, and TK09 are below the minimum size threshold of 75 m3 (19,813 gal), therefore they are exempt from the requirements of this Subpart per 40 CFR §60.110b(a). The NGL tanks (TK06 – TK08) size (30,000 gal) is in the applicable range of 75 m3 - 151 m3 (19,813 gal - 39,890 gal), but they are pressure vessels designed to operate at 1,034 kPa (in excess of 204.9 kPa), and do not have emissions to the atmosphere. Therefore, they are exempt per 40 CFR §60.110b(d)(2).

40 CFR 60 Subpart JJJ – The compressor engines (001-01 and 001-02) are not subject to this subpart since they were manufactured before the applicability date.

40 CFR 64 - Engines do not have any control; Therefore, in accordance with 40 CFR §64.2(a)(2), CAM is not applicable to the engines.

40 CFR 60 Subpart OOOO "Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015" – The Facility commenced construction prior to August 23, 2011 and was not modified or reconstructed after August 23, 2011, and on or before September 18, 2015. Therefore, the Facility is not subject to this subpart.

40 CFR 60 Subpart OOOOa "Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015" – The Facility commenced construction prior to September 18, 2015 and the was not modified or reconstructed after September 18, 2015. Therefore, the Facility is not subject to this subpart.

☒ Permit Shield

**20. Facility-Wide Applicable Requirements**

**List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).**

45 CSR 6-3.1 – Open Burning prohibited (TV 3.1.1)

45 CSR 6-3.2 – Open Burning exemption (TV 3.1.2)

40 CFR Part 61.145(b) / 45 CSR 34 – Asbestos inspection and removal (TV 3.1.3)

45 CSR 11-5.2 – Standby plans for reducing emissions (TV 3.1.5)

WV Code 22-5-4 (a) (14) – The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements (TV 3.1.6)

40 CFR Part 82 Subpart F – Ozone depleting substances (TV 3.1.7)

40 CFR Part 68 – Risk Management Plan (TV 3.1.8)

State Enforceable Only

45 CSR 4-3.1 – Odor control (TV 3.1.4)

45 CSR 17-3.1 – Fugitive particulate matter control (TV 3.1.9)

☒ Permit Shield

**For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 C.F.R. 60, Subpart KKK; 45CSR16 – The permittee is responsible for thoroughly inspecting the facility for the presence of equipment leaks of VOCs (TV 3.2.1, 001-01 and 001-02 are exempt).

WV Code 22-5-4(a)(14-15) and 45CSR13 – Testing Requirements (TV 3.3.1)

45 CSR 30-5.1.c.2.A – The permittee shall keep records of monitoring (TV 3.4.1).

45 CSR 30-5.1.c.2.B – The permittee shall keep records of monitoring and supporting information for at least 5 years (TV 3.4.2).

45 CSR30-4.4 and 5.1.c.3.D. – Any application form shall contain a certification by the responsible official that states that the statements and information in the document are true (TV 3.5.1)

45 CSR 30-5.1.c.3.E. – A permittee may request confidential treatment for the submission of reporting (TV 3.5.2).

45 CSR 30-8 – A permittee shall submit a certified emissions statement annually (TV 3.5.4).

45 CSR 30-5.3.e –The permittee shall certify compliance with the conditions of this permit annually on the forms provided by the DAQ (TV 3.5.5).

45 CSR 30-5.1.c.3.A –The permittee shall submit reports of any required monitoring on or before the required dates (TV 3.5.6).

45 CSR 30-5.1.c.3.B & C – The permittee shall promptly submit supplemental reports and notices of deviation (TV 3.5.8)

State Enforceable Only

45 CSR 30-5.1.c – The permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken (TV 3.4.3)

**Are you in compliance with all facility-wide applicable requirements?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

| 21. Active Permits/Consent Orders | | |
|---|---|---|
| Permit or Consent Order Number | Date of Issuance MM/DD/YYYY | List any Permit Determinations that Affect the Permit *(if any)* |
| R30-01700011-2012 | 03/05/2012 | |
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| 22. Inactive Permits/Obsolete Permit Conditions | | |
|---|---|---|
| Permit Number | Date of Issuance | Permit Condition Number |
| | MM/DD/YYYY | |
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*Section 3: Facility-Wide Emissions*

| 23. Facility-Wide Emissions Summary [Tons per Year] | |
|---|---|
| Criteria Pollutants | Potential Emissions |
| Carbon Monoxide (CO) | 12.70 |
| Nitrogen Oxides ($NO_X$) | 267.88 |
| Lead (Pb) | N/A |
| Particulate Matter ($PM_{2.5}$)[1] | 0.54 |
| Particulate Matter ($PM_{10}$)[1] | 0.54 |
| Total Particulate Matter (TSP) | 1.10 |
| Sulfur Dioxide ($SO_2$) | 0.03 |
| Volatile Organic Compounds (VOC) | 69.00 |
| Hazardous Air Pollutants[2] | Potential Emissions |
| Formaldehyde | 1.16 |
| Acrolein | 0.15 |
| Acetaldehyde | 0.16 |
| Benzene | 0.09 |
| Ethylbenzene | <0.01 |
| Toluene | 0.03 |
| Xylene | 0.01 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions |
| $CO_2$ | 6,635 |
| $CH_4$ | 60.79 |
| $N_2O$ | 0.01 |
| $CO_2e$ | 8,159 |

*[1] $PM_{2.5}$ and $PM_{10}$ are components of TSP.*
*[2] For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.*

*Section 4: Insignificant Activities*

| | | |
|---|---|---|
| **24. Insignificant Activities (Check all that apply)** | | |
| ☒ | 1. | Air compressors and pneumatically operated equipment, including hand tools. |
| ☐ | 2. | Air contaminant detectors or recorders, combustion controllers or shutoffs. |
| ☒ | 3. | Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment. |
| ☒ | 4. | Bathroom/toilet vent emissions. |
| ☐ | 5. | Batteries and battery charging stations, except at battery manufacturing plants. |
| ☐ | 6. | Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description. |
| ☐ | 7. | Blacksmith forges. |
| ☐ | 8. | Boiler water treatment operations, not including cooling towers. |
| ☐ | 9. | Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source. |
| ☐ | 10. | $CO_2$ lasers, used only on metals and other materials which do not emit HAP in the process. |
| ☒ | 11. | Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources. |
| ☒ | 12. | Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel. |
| ☒ | 13. | Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment. |
| ☐ | 14. | Demineralized water tanks and demineralizer vents. |
| ☐ | 15. | Drop hammers or hydraulic presses for forging or metalworking. |
| ☐ | 16. | Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam. |
| ☐ | 17. | Emergency (backup) electrical generators at residential locations. |
| ☐ | 18. | Emergency road flares. |
| ☒ | 19. | Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, $NO_x$, $SO_2$, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units.<br><br>Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:<br><br>Parts washer: VOC emission <0.06 lb/hr and <0.3 tons/yr<br><br>_____<br>_____<br>_____<br>_____<br>_____<br>_____<br>_____<br>_____ |

| 24. Insignificant Activities (Check all that apply) | | |
|---|---|---|
| ☐ | 20. | Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.<br><br>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:<br><br>_____<br>_____<br>_____<br>_____<br>_____ |
| ☐ | 21. | Environmental chambers not using hazardous air pollutant (HAP) gases. |
| ☐ | 22. | Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption. |
| ☐ | 23. | Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment. |
| ☐ | 24. | Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis. |
| ☐ | 25. | Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP. |
| ☒ | 26. | Fire suppression systems. |
| ☒ | 27. | Firefighting equipment and the equipment used to train firefighters. |
| ☐ | 28. | Flares used solely to indicate danger to the public. |
| ☐ | 29. | Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted. |
| ☐ | 30. | Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation. |
| ☒ | 31. | Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic. |
| ☐ | 32. | Humidity chambers. |
| ☐ | 33. | Hydraulic and hydrostatic testing equipment. |
| ☐ | 34. | Indoor or outdoor kerosene heaters. |
| ☒ | 35. | Internal combustion engines used for landscaping purposes. |
| ☐ | 36. | Laser trimmers using dust collection to prevent fugitive emissions. |
| ☐ | 37. | Laundry activities, except for dry-cleaning and steam boilers. |
| ☐ | 38. | Natural gas pressure regulator vents, excluding venting at oil and gas production facilities. |
| ☐ | 39. | Oxygen scavenging (de-aeration) of water. |
| ☐ | 40. | Ozone generators. |

| 24. Insignificant Activities (Check all that apply) | | |
|---|---|---|
| ☒ | 41. | Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.) |
| ☒ | 42. | Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device. |
| ☐ | 43. | Process water filtration systems and demineralizers. |
| ☒ | 44. | Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification. |
| ☐ | 45. | Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified. |
| ☐ | 46. | Routing calibration and maintenance of laboratory equipment or other analytical instruments. |
| ☐ | 47. | Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers. |
| ☐ | 48. | Shock chambers. |
| ☐ | 49. | Solar simulators. |
| ☒ | 50. | Space heaters operating by direct heat transfer. |
| ☐ | 51. | Steam cleaning operations. |
| ☐ | 52. | Steam leaks. |
| ☐ | 53. | Steam sterilizers. |
| ☐ | 54. | Steam vents and safety relief valves. |
| ☐ | 55. | Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized. |
| ☐ | 56. | Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list. |
| ☐ | 57. | Such other sources or activities as the Director may determine. |
| ☐ | 58. | Tobacco smoking rooms and areas. |
| ☐ | 59. | Vents from continuous emissions monitors and other analyzers. |

*Section 5: Emission Units, Control Devices, and Emission Points*

| 25. Equipment Table |
| --- |
| Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D.** |
| **26. Emission Units** |
| For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E.** |
| For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F.** |
| **27. Control Devices** |
| For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G.** |
| For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H.** |

*Section 6: Certification of Information*

**28. Certification of Truth, Accuracy and Completeness and Certification of Compliance**

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

**a. Certification of Truth, Accuracy and Completeness**

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

**b. Compliance Certification**

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

**Responsible official (type or print)**

| Name: Brian C. Sheppard | Title: Vice President, Pipeline Operations |
|---|---|

**Responsible official's signature:**

Signature: _____ Signature Date: 08-11-16

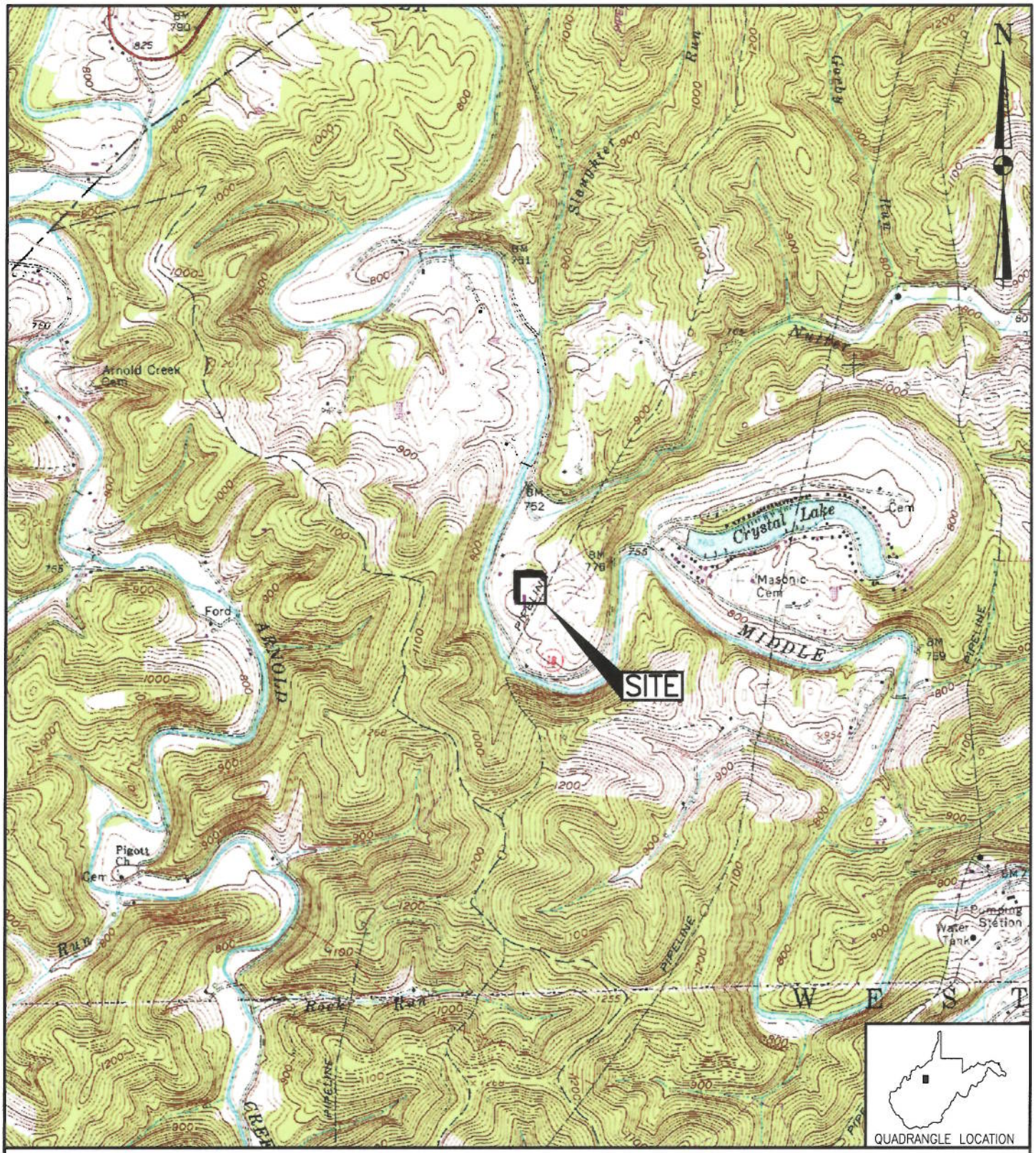
(Must be signed and dated in blue ink)

| **Note: Please check all applicable attachments included with this permit application:** | |
|---|---|
| ☒ | ATTACHMENT A: Area Map |
| ☒ | ATTACHMENT B: Plot Plan(s) |
| ☒ | ATTACHMENT C: Process Flow Diagram(s) |
| ☒ | ATTACHMENT D: Equipment Table |
| ☒ | ATTACHMENT E: Emission Unit Form(s) |
| ☐ | ATTACHMENT F: Schedule of Compliance Form(s) |
| ☐ | ATTACHMENT G: Air Pollution Control Device Form(s) |
| ☐ | ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s) |

***All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/dag, requested by phone (304) 926-0475, and/or obtained through the mail.***

# Attachment A

Area Map




REFERENCE: USGS 7.5' QUADRANGLE MAP OF: WEST UNION, WEST VIRGINIA; DATED 1961, PHOTOREVISED 1976.

| | |
|---|---|
| DRAWN BY | DJF |
| DATE | |
| CHECKED BY | |
| SET JOB NO. | 203076 |
| SET DWG FILE | WEST_UNIONm01.dwg |
| DRAWING SCALE | 1"=2000' |

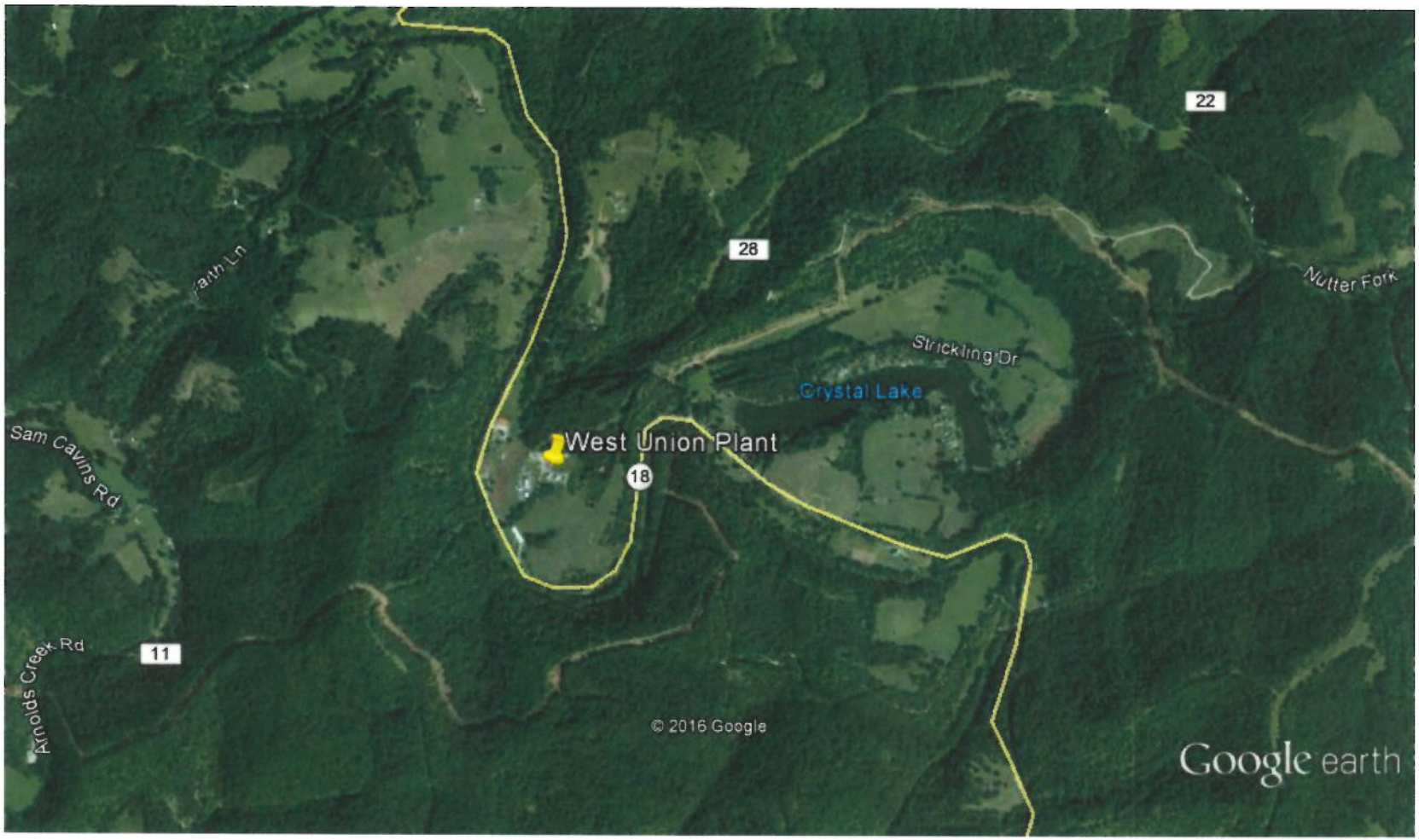
SE TECHNOLOGIES
98 Vanadium Road Bridgeville, PA 15017 (412) 221-1100

# DOMINION TRANSMISSION

WEST UNION NGL PLANT
DODDRIDGE COUNTY, WEST VIRGINIA
SITE LOCATION MAP

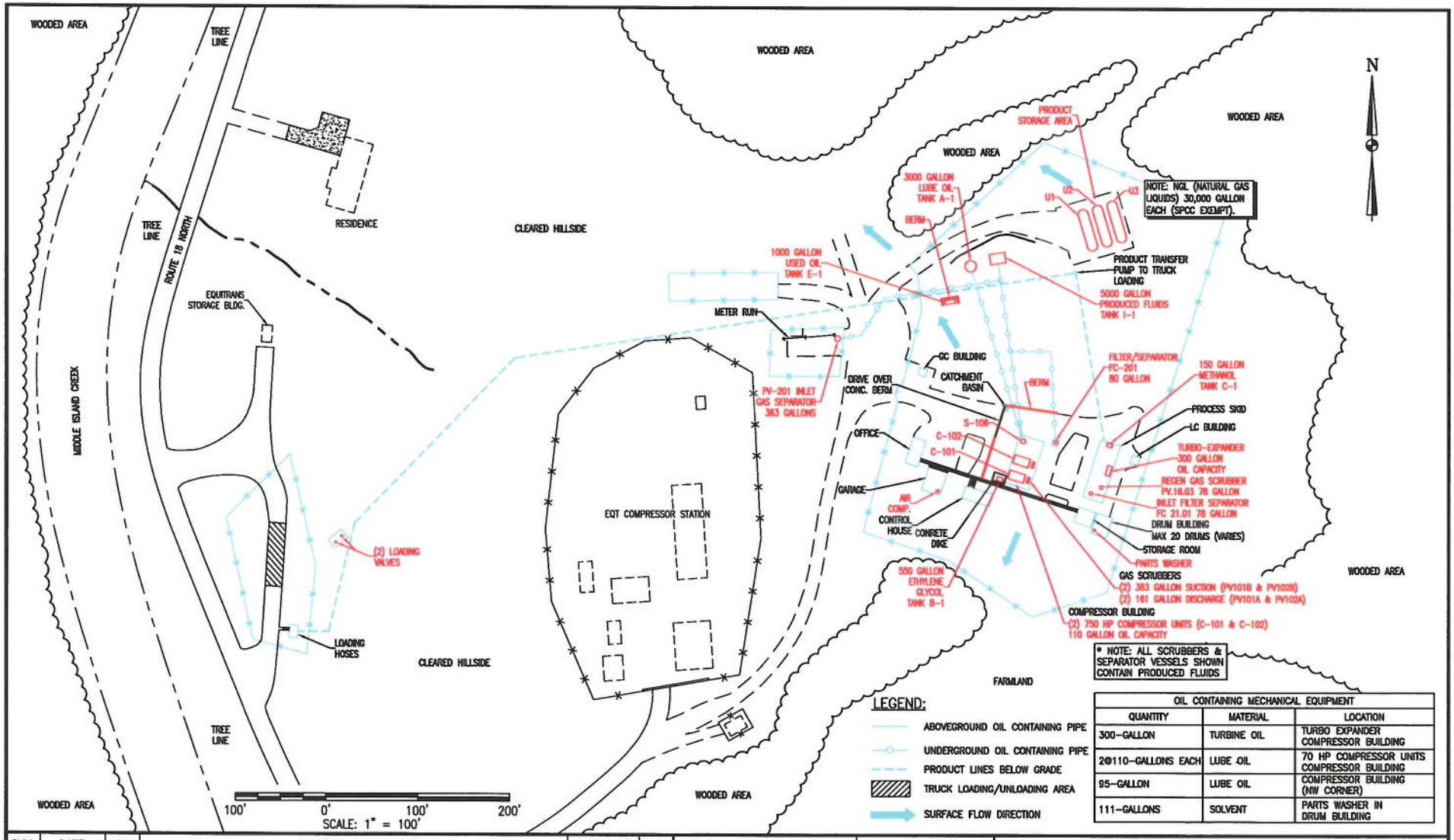
| DRAWING NO. | REV. |
|---|---|
| FIGURE 10 | 0 |

Plot: env045 06/05/2003 12:55 G:\DOMINION\203076\WEST_UNIONm01.dwg


22
28
Nutter Fork
Strickling Dr
Crystal Lake
West Union Plant
18
Sam Cavins Rd
Arnolds Creek Rd
11
© 2016 Google
Google earth

**Attachment B**

Plot Plan




| OIL CONTAINING MECHANICAL EQUIPMENT | | |
|---|---|---|
| QUANTITY | MATERIAL | LOCATION |
| 300-GALLON | TURBINE OIL | TURBO EXPANDER COMPRESSOR BUILDING |
| 2@110-GALLONS EACH | LUBE OIL | 70 HP COMPRESSOR UNITS COMPRESSOR BUILDING |
| 95-GALLON | LUBE OIL | COMPRESSOR BUILDING (NW CORNER) |
| 111-GALLONS | SOLVENT | PARTS WASHER IN DRUM BUILDING |

| SYM. | DATE | BY | REVISION DESCRIPTION | PRJ/TSK | APP. |
|---|---|---|---|---|---|
| | | | | | |
| 4 | 03/09/16 | TBB | REVISED PER TIM JACKSON MARK UPS | | |
| 3 | 11/18/14 | TBB | SCALED, ADDED BAR SCALE, ADDED ADJACENT PROPERTIES, & REVISED NORTH ARROW | | |
| 2 | 03/20/14 | JRB | UPDATED PER LAURA BROOKS MARK UPS | | |
| 1 | 08/26/13 | MPR | ADDED TITLE BLOCK & REVISED PER TIM JACKSONS MARK UPS | | |

| | | |
|---|---|---|
| SCALE | 1" = 100' | DATE |
| DRAWN | DJF | 01/03/13 |
| CHECKED | MFP | |
| APP. FOR BID | | |
| APP. FOR CONST. | | |
| TOWN: | WEST UNION, WV | COUNTY: DODDRIDGE |


Dominion Transmission, Inc.
925 White Oaks Blvd. Bridgeport, West Virginia 26330 / Phone: (681) 842-3000


FOR: WEST UNION NGL PLANT

TITLE: ENVIRONMENTAL EMERGENCY SITE PLAN

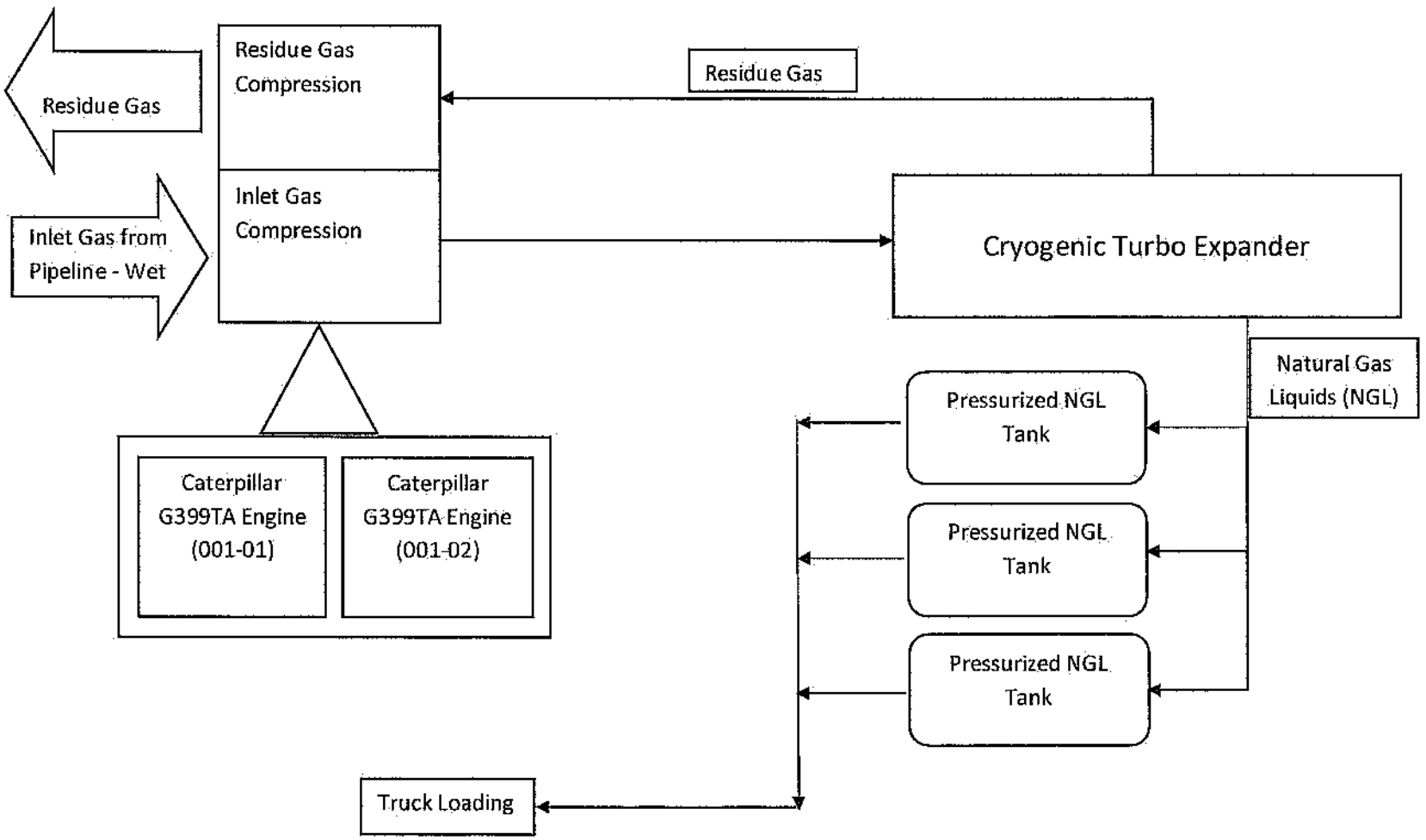
| DIR: | GROUP | DWG. NO. | REV. |
|---|---|---|---|
| DOCUMENTUM | PD | X9768D | 4 |
| FILE: PRJ/TSK: | | | |


Printed: Mar 09, 2016 @08:24, By: tlm0409, Filename: PDX9768D.dwg

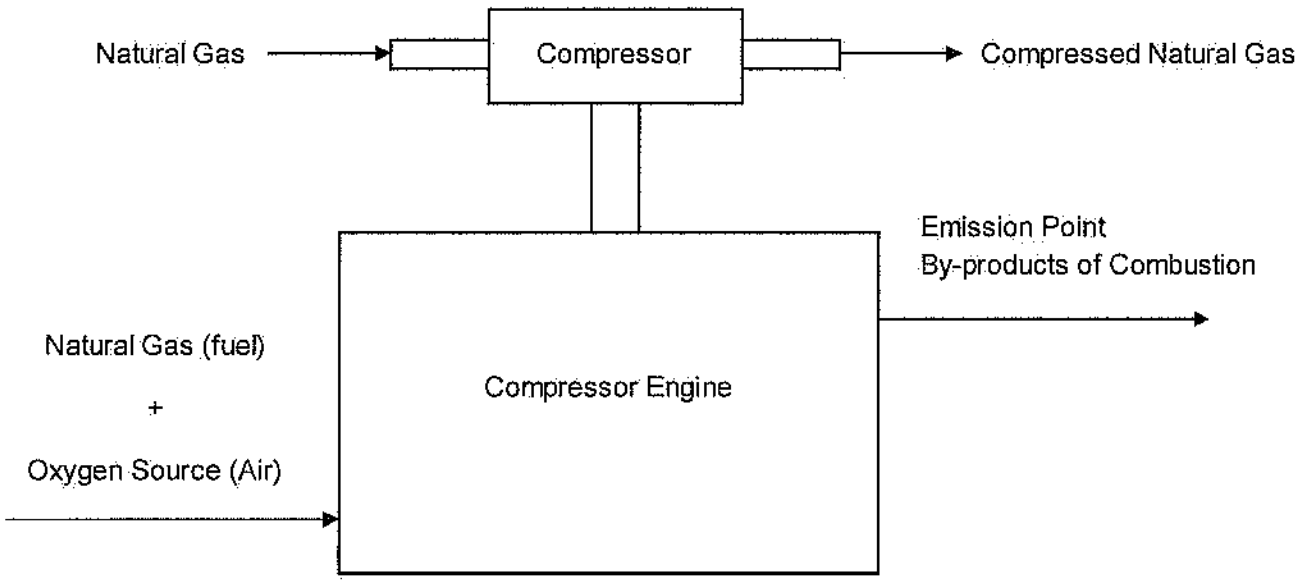
# Attachment C

Process Flow Diagrams

# West Union Extraction Plant Process Diagram



**Compressor Engines (001-01 and 001-02) Process Flow Diagram**



# Attachment D

Title V Equipment Table

## ATTACHMENT D - Title V Equipment Table

**(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)**

| Emission Point ID[1] | Control Device[1] | Emission Unit ID[1] | Emission Unit Description | Design Capacity | Year Installed/ Modified |
|---|---|---|---|---|---|
| 001-01* | N/A | 001 & 004 | Reciprocating compressor engine; Caterpillar G399TA – 4 cycle, rich burn | 730 HP | 1984 |
| 001-02* | N/A | 002 & 004 | Reciprocating compressor engine; Caterpillar G399TA – 4 cycle, rich burn | 730 HP | 1984 |
| TK01 | N/A | TK01 | Vertical Lube Oil Storage Tank | 3,000-gallon | 2008 |
| TK02 | N/A | TK02 | Horizontal Ethylene Glycol Storage Tank | 550-gallon | 2008 |
| TK03 | N/A | TK03 | Horizontal Methanol Storage Tank | 150-gallon | 2008 |
| TK05 | N/A | TK05 | Horizontal Wastewater Storage Tank | 5,000-gallon | 2008 |
| TK06 | Pressure Tank | TK06 | Horizontal Natural Gas Liquid Storage Tank | 30,000-gallon | 1984 |
| TK07 | Pressure Tank | TK07 | Horizontal Natural Gas Liquid Storage Tank | 30,000-gallon | 1984 |
| TK08 | Pressure Tank | TK08 | Horizontal Natural Gas Liquid Storage Tank | 30,000-gallon | 1984 |
| New units to equipment list: | | | | | |
| TK09 | N/A | TK09 | Horizontal Used Oil Tank | 1,000-gallon | 2012 |
| Units that have been removed: | | | | | |
| TK04 | N/A | TK04 | Horizontal Wastewater Storage Tank | 150-gallon | 2008 |
| | | | | | |
| | | | | | |

*Equipment burns or combusts pipeline quality natural gas only.

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

# Attachment E

Emission Unit Forms

# ATTACHMENT E - Emission Unit Form

***Emission Unit Description***

| **Emission unit ID number:** | **Emission unit name:** | **List any control devices associated with this emission unit:** |
|---|---|---|
| 001-01 | Engine 01<br>Reciprocating Engine | N/A |

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**
Natural gas fired reciprocating internal combustion engine

| **Manufacturer:** | **Model number:** | **Serial number:** |
|---|---|---|
| Caterpillar | G399TA | 49C00879 |

| **Construction date:** | **Installation date:** | **Modification date(s):** |
|---|---|---|
| | 1984 | N/A |

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**
730 HP

| **Maximum Hourly Throughput:** | **Maximum Annual Throughput:** | **Maximum Operating Schedule:** |
|---|---|---|
| 0.00648 MMcf/hr | 56.76 MMcf/yr | 8,760 hrs/yr |

***Fuel Usage Data*** **(fill out all applicable fields)**

| **Does this emission unit combust fuel?** | **If yes, is it?** |
|---|---|
| _X_ Yes ___ No | ___ Indirect Fired _X_ Direct Fired |

| **Maximum design heat input and/or maximum horsepower rating:** | **Type and Btu/hr rating of burners:** |
|---|---|
| 730 HP | 6.48 MMBtu/hr |

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**
Pipeline quality natural gas

- Maximum hourly fuel usage = 0.00648 MMcf/hr
- Maximum annual fuel usage = 56.76 MMcf/yr

**Describe each fuel expected to be used during the term of the permit.**

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|---|---|---|---|
| Pipeline quality natural gas | 20 gr sulfur/100 cf | N/A | 1,000 Btu/cf |
| | | | |
| | | | |
| | | | |

| *Emissions Data* | | |
|---|---|---|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | 1.45 | 6.35 |
| Nitrogen Oxides ($NO_X$) | 30.58 | 133.94 |
| Lead (Pb) | N/A | N/A |
| Particulate Matter ($PM_{2.5}$) | 0.06 | 0.27 |
| Particulate Matter ($PM_{10}$) | 0.06 | 0.27 |
| Total Particulate Matter (TSP) | 0.13 | 0.55 |
| Sulfur Dioxide ($SO_2$) | < 0.01 | 0.02 |
| Volatile Organic Compounds (VOC) | 1.56 | 6.83 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Formaldehyde | 0.13 | 0.58 |
| Benzene | 0.01 | 0.04 |
| Toluene | <0.01 | 0.02 |
| Ethylbenzene | <0.01 | <0.01 |
| Xylenes | <0.01 | 0.01 |
| Acetaldehyde | 0.02 | 0.08 |
| Acrolein | 0.02 | 0.07 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| $CO_2$ | 757.43 | 3,318 |
| $CH_4$ | 0.01 | 0.06 |
| $N_2O$ | <0.01 | 0.01 |
| $CO_2e$ | 758.21 | 3,321 |

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

- CO, $NO_x$, and VOC emission rates based on manufacturer specifications.
- $PM_{10}$, $PM_{2.5}$, $SO_2$, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-1, 7/00.
- $CO_2$, $CH_4$, and $N_2O$ emission factors based on Tables C-1 and C-2 of 40 CFR Part 98, Subpart C, and $CO_2e$ emission rates use the following carbon equivalence factors: 25 for $CH_4$, and 298 for $N_2O$.

*Applicable Requirements*

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

**Note: This unit is a "remote" RICE unit under NESHAP Subpart ZZZZ. Therefore, the requirements below are based off of that category and not of the conditions in the Title V permit (which are not for remote units).

40 CFR Part 63 Subpart ZZZZ – NESHAP Applicability
40 CFR Part 63 Subpart ZZZZ – NESHAP Emission Limitations
40 CFR Part 63 Subpart ZZZZ – NESHAP Operation and Maintenance Requirements
40 CFR Part 63 Subpart ZZZZ – NESHAP Continuous Compliance Requirements
40 CFR Part 63 Subpart ZZZZ – NESHAP Recordkeeping Requirements
40 CFR Part 63 Subpart ZZZZ – NESHAP General Requirements/Provisions

__X__ Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs (replace as necessary), and inspect all hoses and belts (replace as necessary) every 2,160 hours of operation or annually, whichever comes first, or implement an oil analysis program. [63.6595(a)(1), 63.6603(a), and Table 2d item 11]

40 CFR Part 63 Subpart ZZZZ – Evaluate the status of the RICE every 12 months to determine the remote status [63.6603(f)]

40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan [Table 6 Item 9]

40 CFR Part 63 Subpart ZZZZ – Operate RICE minimizing the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [63.6625(h)]

40 CFR Part 63 Subpart ZZZZ – Maintain RICE with an option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d, with the oil analysis being performed at the same frequency specified for changing the oil in Table 2d. [63.6625(j)]

40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (63.6605)

40 CFR Part 63 Subpart ZZZZ – Demonstrate continuous compliance with emissions and operating limitations. [63.6640(a), (b), and (e), and Table 6 Item 9]

40 CFR Part 63 Subpart ZZZZ – Comply with all applicable recordkeeping requirements [63.6655(a), (d), and (e), 63.10(b)(1)]

40 CFR Part 63 Subpart ZZZZ – Comply with all applicable recordkeeping requirements [63.6655, 63.10(b)(1)]

**Are you in compliance with all applicable requirements for this emission unit?** __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F.**

# ATTACHMENT E - Emission Unit Form

*Emission Unit Description*

| **Emission unit ID number:** | **Emission unit name:** | **List any control devices associated with this emission unit:** |
|---|---|---|
| 001-02 | Engine 02<br>Reciprocating Engine | N/A |

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**
Natural gas fired reciprocating internal combustion engine

| **Manufacturer:** | **Model number:** | **Serial number:** |
|---|---|---|
| Caterpillar | G399TA | 49C00879 |

| **Construction date:** | **Installation date:** | **Modification date(s):** |
|---|---|---|
| | 1984 | N/A |

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**
730 HP

| **Maximum Hourly Throughput:** | **Maximum Annual Throughput:** | **Maximum Operating Schedule:** |
|---|---|---|
| 0.00648 MMcf/hr | 56.76 MMcf/yr | 8,760 hrs/yr |

*Fuel Usage Data* **(fill out all applicable fields)**

| **Does this emission unit combust fuel?** | **If yes, is it?** |
|---|---|
| __X__ Yes ___ No | ___ Indirect Fired ___X___ Direct Fired |

| **Maximum design heat input and/or maximum horsepower rating:** | **Type and Btu/hr rating of burners:** |
|---|---|
| 730 HP | 6.48 MMBtu/hr |

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**
Pipeline quality natural gas

- Maximum hourly fuel usage = 0.00648 MMcf/hr
- Maximum annual fuel usage = 56.76 MMcf/yr

**Describe each fuel expected to be used during the term of the permit.**

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|---|---|---|---|
| Pipeline quality natural gas | 20 gr sulfur/100 cf | N/A | 1,000 Btu/cf |
| | | | |
| | | | |
| | | | |

| *Emissions Data* | | |
|---|---|---|
| Criteria Pollutants | Potential Emissions | |
| | PPH | TPY |
| Carbon Monoxide (CO) | 1.45 | 6.35 |
| Nitrogen Oxides ($NO_X$) | 30.58 | 133.94 |
| Lead (Pb) | N/A | N/A |
| Particulate Matter ($PM_{2.5}$) | 0.06 | 0.27 |
| Particulate Matter ($PM_{10}$) | 0.06 | 0.27 |
| Total Particulate Matter (TSP) | 0.13 | 0.55 |
| Sulfur Dioxide ($SO_2$) | < 0.01 | 0.02 |
| Volatile Organic Compounds (VOC) | 1.56 | 6.83 |
| Hazardous Air Pollutants | Potential Emissions | |
| | PPH | TPY |
| Formaldehyde | 0.13 | 0.58 |
| Benzene | 0.01 | 0.04 |
| Toluene | <0.01 | 0.02 |
| Ethylbenzene | <0.01 | <0.01 |
| Xylenes | <0.01 | 0.01 |
| Acetaldehyde | 0.02 | 0.08 |
| Acrolein | 0.02 | 0.07 |
| Regulated Pollutants other than Criteria and HAP | Potential Emissions | |
| | PPH | TPY |
| $CO_2$ | 757.43 | 3,318 |
| $CH_4$ | 0.01 | 0.06 |
| $N_2O$ | <0.01 | 0.01 |
| $CO_2e$ | 758.21 | 3,321 |

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

- CO, $NO_x$, and VOC emission rates based on manufacturer specifications.
- $PM_{10}$, $PM_{2.5}$, $SO_2$, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-1, 7/00.
- $CO_2$, $CH_4$, and $N_2O$ emission factors based on Tables C-1 and C-2 of 40 CFR Part 98, Subpart C, and $CO_2e$ emission rates use the following carbon equivalence factors: 25 for $CH_4$, and 298 for $N_2O$.

*Applicable Requirements*

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

**Note: This unit is a "remote" RICE unit under NESHAP Subpart ZZZZ. Therefore, the requirements below are based off of that category and not of the conditions in the Title V permit (which are not for remote units).

40 CFR Part 63 Subpart ZZZZ – NESHAP Applicability
40 CFR Part 63 Subpart ZZZZ – NESHAP Emission Limitations
40 CFR Part 63 Subpart ZZZZ – NESHAP Operation and Maintenance Requirements
40 CFR Part 63 Subpart ZZZZ – NESHAP Continuous Compliance Requirements
40 CFR Part 63 Subpart ZZZZ – NESHAP Recordkeeping Requirements
40 CFR Part 63 Subpart ZZZZ – NESHAP General Requirements/Provisions

__X__ Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs (replace as necessary), and inspect all hoses and belts (replace as necessary) every 2,160 hours of operation or annually, whichever comes first, or implement an oil analysis program. [63.6595(a)(1), 63.6603(a), and Table 2d item 11]

40 CFR Part 63 Subpart ZZZZ – Evaluate the status of the RICE every 12 months to determine the remote status [63.6603(f)]

40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan [Table 6 Item 9]

40 CFR Part 63 Subpart ZZZZ – Operate RICE minimizing the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [63.6625(h)]

40 CFR Part 63 Subpart ZZZZ – Maintain RICE with an option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d, with the oil analysis being performed at the same frequency specified for changing the oil in Table 2d. [63.6625(j)]

40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (63.6605)

40 CFR Part 63 Subpart ZZZZ – Demonstrate continuous compliance with emissions and operating limitations. [63.6640(a), (b), and (e), and Table 6 Item 9]

40 CFR Part 63 Subpart ZZZZ – Comply with all applicable recordkeeping requirements [63.6655(a), (d), and (e), 63.10(b)(1)]

40 CFR Part 63 Subpart ZZZZ – Comply with all applicable recordkeeping requirements [63.6655, 63.10(b)(1)]

**Are you in compliance with all applicable requirements for this emission unit?** __X__ Yes ___ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.